

Patent Abstracts of Japan

PUBLICATION NUMBER : 63013386
PUBLICATION DATE : 20-01-88

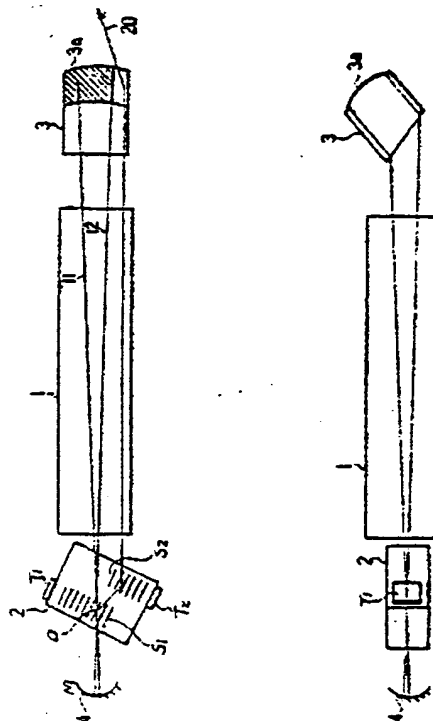
APPLICATION DATE : 04-07-86
APPLICATION NUMBER : 61157430

APPLICANT : HAMAMATSU PHOTONICS KK;

INVENTOR : TAKESHIMA AKIRA;

INT.CL. : H01S 3/08 H01S 3/098 H01S 3/117

TITLE : SHORT-PULSE LASER BEAM
GENERATOR



ABSTRACT : PURPOSE: To extract light at short pulse spacings by a small-sized device by arranging a prism, a laser tube and an ultrasonic optical reflector into a laser resonator constituted of oppositely faced first and second concave total reflection mirrors in the order in succession from the first concave total reflection mirror side and driving the ultrasonic optical deflector.

CONSTITUTION: When light of 5145 nm are projected to a prism 3 at a Brewster's angle, the prism 3 and an oppositely faced total reflection mirror 4 are arranged at the position of an angle where only light of 5145 nm is returned to the total reflection mirror 4. A total reflection mirror 3a for the prism 3 and the total reflection mirror 4 are both formed in a concave mirror, and oscillation laser beams 11, 12 are converged to one point 0 between a laser tube 1 and the total reflection mirror 4. Argon discharge light of P-polarized light is diffracted spectrally by the prism 3 with the total reflection mirror, only light of 5145 nm is laser-oscillated from diffracted light, and the laser beams are deflected only in a short time by a Bragg cell 2 positioned in a laser resonator and extracted to the outside of a laser device as short pulse beams.

COPYRIGHT: (C) JPO

BEST AVAILABLE COPY